

**AUGUST, 1992 QUARTERLY GROUND
WATER SAMPLING REPORT
FOR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA**

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HOEXTER CONSULTING

734 Torrey Court
Palo Alto, California 94303

(415) 494-2505

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#553

92 SEP 10 PM 4:00

TRANSMITTAL

TO Alameda County - Environmental
Health - 80 Swan Way, Room 200
Oakland, CA 94621

DATE 9/1/92
VIA US Mail
FAH NO. _____

ATTENTION Mr. Larry Sato

PROJECT 1970 Seminary
Oakland CA

JOB NO. E-10-1-019

DESCRIPTION August 31, 1992 Quarterly Report

Number of pages, including cover page, if FAH _____

COMMENTS _____

ACTION

- As requested
- For your use
- Please return when finished
- Please review and comment
- Other _____

COPY TO _____

BY D. F. Hoexter
David F. Hoexter

Geology / Engineering Geology / Environmental Studies

**HOEXTER CONSULTING, Inc.
David F. Hoexter, C.E.G./R.E.A.**

**734 Torrey Court
Palo Alto, California 94303**

(415) 494-2505

August 31, 1992
E-10-1-019

Mr. Doyle Gruit
14366 Lark Street
San Leandro, California 94578

RE: AUGUST, 1992 QUARTERLY
GROUND WATER SAMPLING
REPORT

Dear Mr. Gruit:

Enclosed is our August, 1992 quarterly ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon, in Oakland, California. This sampling round is the third quarterly sampling performed by Hoexter Consulting at the site. The results of an initial sampling round by Kaldveer Associates, Inc, following well installation, and the previous Hoexter Consulting sampling, are included in the analytical results summary table.

The results of this investigation indicate that the water sample from the on-site well contains 170 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G). The water sample also contains the aromatic compounds benzene, toluene, xylenes, and ethylbenzene (BTXE), at concentrations of 4.2, 4.2, 15.0, and 3.3 ppm respectively, and oil and grease at a concentration of 120 ppm.

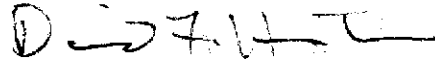
The test results for TPH-G and for oil and grease are generally significantly lower, and the BTXE test results approximately the same or lower, as the April, 1992 sampling results.

We recommend that copies of this report be submitted to the California Regional Water Quality Control Board and the Alameda County Department of Environmental Health. The next round of sampling is scheduled for the week of November 9, 1992.

We appreciate the opportunity to provide services to you on this project and trust this report meets your needs at this time. If you have any questions, or require additional information, please do not hesitate to call.

Very truly yours,

HOEXTER CONSULTING, INC.

A handwritten signature in black ink, appearing to read "D. Hoexter".

David F. Hoexter, CEG/REA
Principal

Copies: Addressee (2)
California Regional Water Quality Control Board (1)
Attention: Mr. Tom Callaghan
Alameda County, Department of Environmental Health (1)
Attention: Mr. Larry Seto

**AUGUST, 1992 QUARTERLY
GROUND WATER SAMPLING REPORT**

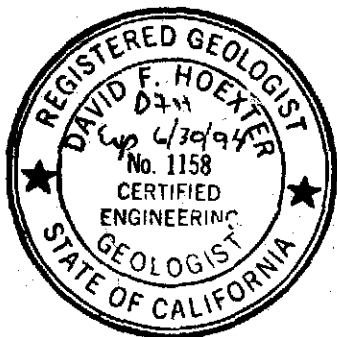
For

1970 Seminary Avenue
Oakland, California

To

Mr. Doyle Gruit
14366 Lark Street
San Leandro, California 94578

August, 1992



D. F. Hoexter

David F. Hoexter, C.E.G. / R.E.A.
Principal

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Letter of Transmittal

TITLE PAGE

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AUGUST, 1992 QUARTERLY GROUND WATER
SAMPLING REPORT
FOR
1970 SEMINARY
OAKLAND, CALIFORNIA

I. INTRODUCTION

This report presents the results of the August, 1992 quarterly ground water sampling at 1970 Seminary, Oakland, California. The project location is shown on the Site Location Map, Figure 1. The scope of services provided during this investigation consisted of collecting and analyzing ground water samples from one on-site monitoring well. Ground water samples were analyzed for total petroleum hydrocarbons as gasoline, for purgeable aromatic compounds, and for oil and grease. Well locations are shown on the Well Location Map, Figure 2.

II. FIELD INVESTIGATION

The ground water monitoring well was sampled by a representative of Sequoia Analytical on August 10, 1992. The entire well purging and sampling procedure was observed by David F. Hoexter, CEG/REA. Following an initial ground water level measurement (Table 1), four well-casing volumes of water were purged from the well using a teflon bailer. Recovery of the well following purging of the third well volume was slow, and the well was sampled after attaining approximately 50 per cent recovery from the extraction of the fourth well purging volume. The initial depth to ground water was 1.25 feet greater than the previous sampling, indicating a decline in ground water table elevation. It is not known whether this decline in ground water elevation resulted in the reduced recovery rate following purging of the well.

Following purging, samples were collected using the teflon bailer, placed in appropriate sample containers supplied by the analytical laboratory, labeled, and placed in refrigerated storage for transport to the laboratory under chain-of-custody control. All sampling equipment was thoroughly cleaned with trisodium phosphate detergent and rinsed with distilled water prior to sampling the well. Monitoring well sampling logs and the chain of custody are attached to this report as a part of Appendix I. The laboratory is California Department of Health Services approved for the requested analyses.

III. ANALYTICAL RESULTS

A. Laboratory Procedures

The ground water sample was analyzed by Sequoia Analytical of Redwood City, California. The sample was analyzed for total petroleum hydrocarbons as gasoline (TPH-G) using EPA Method 5030/8015; for purgeable aromatic compounds (BTEX) using EPA Method 8020; and for oil and grease (total recoverable petroleum oil, TOG) using Standard Method 5520 C&F (IR).

B. Analytical Results

The results of the chemical analyses are presented on Table 2 and are attached to this report as a part of Appendix I. Analytical results of all previous testing, including the August,

1990 sampling by Kaldveer Associates, Inc, following well installation, are also included. The current analytical results indicate that hydrocarbons as gasoline were detected in the monitoring well at a concentration of 170 ppm. The purgeable aromatic compounds benzene, toluene, xylenes and ethylbenzene were detected at concentrations of 4.2, 4.2, 15 and 3.3 ppm, respectively. Oil and grease was detected at a concentration of 120 ppm.

The test results indicate a decline in detected concentrations of TPH-G and oil, as well as ethyl benzene and xylenes, from the previous (April, 1992) detected levels analyzed by Sequoia Analytical. The concentrations are of similar order-of-magnitude as those detected by Applied Remediation Laboratory in a split of the April, 1992 sample.

It should be noted that floating product was not observed in the initial sounding of the well, although a sheen (floating film) of oil was observed. This film was present in the bailer after purging four well volumes.

IV. LIMITATIONS

This report has been prepared according to generally accepted geologic and environmental practices. No other warranty, either expressed or implied as to the methods, results, conclusions or professional advice provided is made. The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation; review of previous reports relevant to the site conditions; and laboratory results from an outside analytical laboratory.

Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.

TABLE 1

GROUND WATER ELEVATION DATA
(All Measurements in Feet)

<u>Well Number</u>	<u>Well Top Elevation</u>	<u>Depth to Water</u>	<u>Relative Ground Water Elevation</u>
MW-1 1/28/92	N/A	21.0	N/A
4/27/92	N/A	20.95	N/A
8/10/92	N/A	22.20	N/A

Notes:

(1) N/A = Not Applicable

TABLE 2

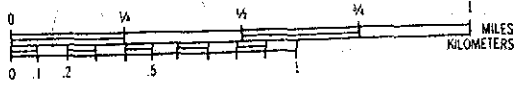
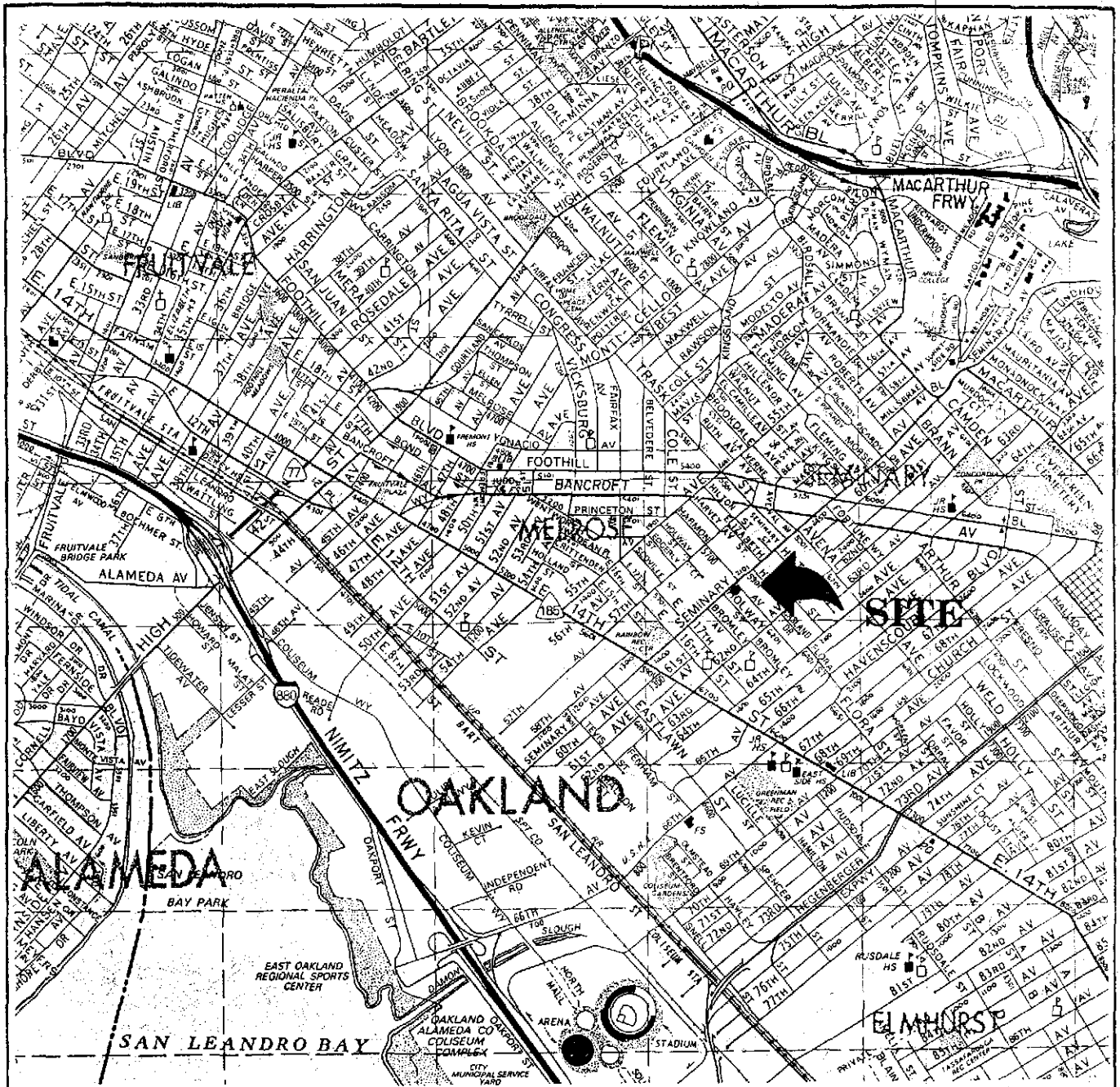
SUMMARY OF GROUND WATER ANALYSES

(Results reported in parts per million, mg/l) (1)

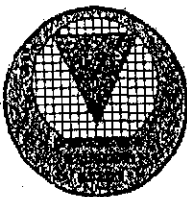
<u>Date</u>	<u>TPH</u> <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-</u> <u>benzene</u>	<u>Oil &</u> <u>Grease</u>
8/6/90 (2)	54	3.5	3.2	9.4	1.9	7.6
1/28/92 (3)	2,000	7.4	17.0	120.0	28.0	75 (5)
4/27/92 (3)	500	3.4	6.4	45.0	10.0	440 (6)
4/27/92 (4)	175	4.2	4.4	14.6	3.2	N/A
8/10/92 (3)	170	4.2	4.2	15.0	3.3	120 (6)

Notes:

- (1) ND - non-detect; N/A - not applicable
- (2) Kaldveer Associates report, September, 1990
- (3) Sequoia Analytical Laboratory
- (4) Applied Remediation Laboratory
- (5) Gravimetric Method
- (6) Infrared Method



Base: Thomas Brothers Maps, 1991

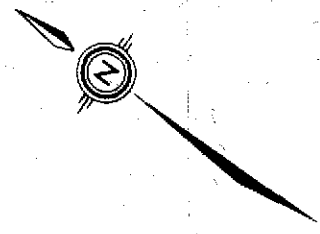
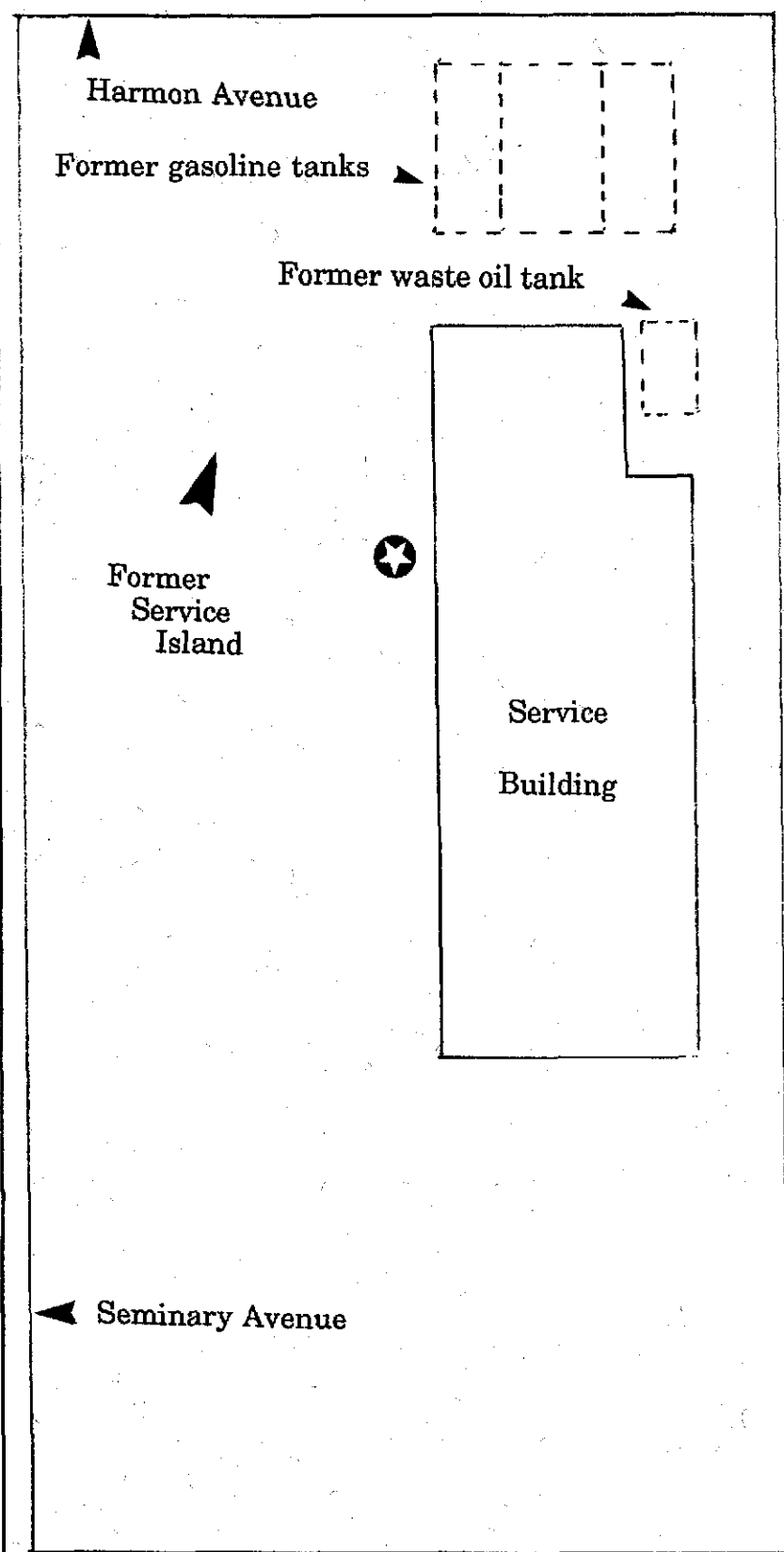


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SITE LOCATION MAP

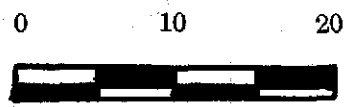
170 Seminary Avenue
 Oakland, California

PROJECT NO.	DATE	Figure 1
E-10-1-019	August, 1992	



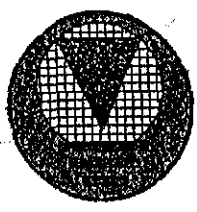
LEGEND

Monitoring Well



Approximate Scale in Feet

Base: Kaldveer Associates, 1990



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WELL LOCATION MAP

1970 Seminary Avenue
 Oakland, California

PROJECT NO.	DATE	Figure 2
E-10-1-019	August, 1992	

APPENDIX I
WATER SAMPLE LOG
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torrey Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Well Number: #1
Sampled By: Mark Ellery
Report ID: 208-2133

Date Sampled: Aug 10, 1992
Time Sampled: 10:05 AM
Date Reported: Aug 26, 1992

WELL SAMPLING DATA

PURGE METHOD

Bailer
 "TRI-LOC"
 Purge Pump

SAMPLING METHOD

Bailer
 Pump
 Other

SAMPLE TYPE

Composite
 Grab

FREE PRODUCT

Yes
 No
centimeters

WELL DATA

Well Depth, ft. 34.67
Water Level, ft. 22.2
Casing Diam., in. 2"
1 Casing Volume 2.05 gallons*

*Casing volume =
(Casing Diameter) * * 0.041 * (Well Depth - Water Level)

Well Volumes	pH	Cond. (µS)	Temp (°C)
1 0	7.1	600	19°C
2 2	7.2	500	18°C
3 4	7.0	500	18°C
4 6	6.8	600	19°C
5			
6			
7			
8			
9			
10			

Comments:

Distinct gasoline smell, oil film also present.
Well was slow to recharge after approximately two well volumes.
David Hoexter decided to sample at 50% recharge.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager



SEQUOIA ANALYTICAL CHAIN OF CUSTODY

- 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
- 819 West Striker Ave. • Sacramento, CA 95833 • (916) 921-9600 FAX (916) 921-0100
- 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

SAMPLING

Company Name: <u>Hoexter Consulting</u>			Project Name: <u>1070 Seminary Ave.</u>		
Address:			Billing Address (if different): <u>TRAVEL - 1hr 40m</u>		
City:	State:	Zip Code:	ON-SITE - 1hr 22m		
Telephone:		FAX #:	TOTAL - 3hr 02m		
Report To: <u>David Hoexter</u>		Sampler:	QC Data: <input checked="" type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> CLP		

Turnaround Time: 15 Working Days 3 Working Days 2 - 8 Hours
 10 Working Days 2 Working Days
 5 Working Days 24 Hours

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	5520 C&F TPH - 0.00g										Comments
1. MW-1	8-10-92 11:28	W	1	O&G	2082133	X										
2. ↓	8-10-92 11:29x3	↓	3	VOC	↓											
3. TB					2082134											
4.																
5.																
6.																
7.																
8.																
9.																
10.																

Relinquished By:	Date:	Time:	Received By: <u>Clark V. Elley</u>	Date: <u>8-10-92</u>	Time: <u>11:34a</u>
Relinquished By: <u>Clark V. Elley</u>	Date: <u>8-10-92</u>	Time: <u>12:04</u>	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <u>RP</u>	Date: <u>8-10-92</u>	Time: <u>12:06</u>

Pink - Client
Yellow - Sequoia
White - Sequoia



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RECEIVED AUG 28 1992

E-10 -1-019

Hoexter Consulting
734 Torrey Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Client Project ID: 1970 Seminary
Sample Matrix: Water
Analysis Method: EPA 5030/8015/8020
First Sample #: 208-2133

Sampled: Aug 10, 1992
Received: Aug 10, 1992
Reported: Aug 26, 1992

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 208-2133 MW-1
Purgeable Hydrocarbons	50	170,000
Benzene	0.50	4,200
Toluene	0.50	4,200
Ethyl Benzene	0.50	3,300
Total Xylenes	0.50	15,000

Chromatogram Pattern: Gasoline

Quality Control Data

Report Limit Multiplication Factor:	2,000
Date Analyzed:	8/19/92
Instrument Identification:	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	105

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

2082133.HHH <1>



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torreya Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Client Project ID: 1970 Seminary
Matrix Descript: Water
Analysis Method: SM 5520 C&F (Infrared)
First Sample #: 208-2133

Sampled: Aug 10, 1992
Received: Aug 10, 1992
Analyzed: Aug 21, 1992
Reported: Aug 26, 1992

TOTAL RECOVERABLE OIL & GREASE

Sample Number	Sample Description	Oil & Grease mg/L (ppm)
208-2133	MW-1	120

Detection Limits: 5.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

Please Note:

This page amended 9/2/92.

2082133.HHH <2>



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torrey Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Client Project ID: 1970 Seminary

QC Sample Group: 208-2133

Reported: Aug 26, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total Oil & Grease
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	SM 5520 C&F
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	P. Penner
Reporting Units:	µg/L	µg/L	µg/L	µg/L	mg/L
Date Analyzed:	Aug 19, 1992	Aug 19, 1992	Aug 19, 1992	Aug 19, 1992	Aug 21, 1992
QC Sample #:	GBLK081992	GBLK081992	GBLK081992	GBLK081992	Blank
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30	40
Conc. Matrix Spike:	10	10	10	30	34
Matrix Spike % Recovery:	100	100	100	100	85
Conc. Matrix Spike Dup.:	10	10	10	31	30
Matrix Spike Duplicate % Recovery:	100	100	100	103	75
Relative % Difference:	0.0	0.0	0.0	3.0	13

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$